

18 December 2014

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**OLD WALLGROVE ROAD UPGRADE, AUSTRAL ACCESS WORKS -
FLORA AND FAUNA ADDENDUM ASSESSMENT**

Dear Andrew,

This letter presents a flora and fauna assessment of the proposed Austral road access works along Old Wallgrove Road, which is an extension of the Old Wallgrove Road Upgrade project.

The Old Wallgrove Road Upgrade project was previously assessed by Cumberland Ecology in May 2014 (ref: 14063 – Let3) but the Austral access works was not considered in that assessment. This flora and fauna assessment is intended to be an addendum to the previous flora and fauna assessment and pertains only to the area of the proposed Austral access works (hereafter, the “subject site”).

This assessment considers the likely presence of threatened species, populations and ecological communities that are listed under the NSW *Threatened Species Conservation Act 1995* (TSC Act) and Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). It evaluates the potential for significant adverse impacts from the proposed Austral access works on threatened species, populations and ecological communities.

1. Proposed Works

As part of the Old Wallgrove Road Upgrade, access to the Austral Brickworks site from Old Wallgrove Road will need to be upgraded. The upgrade will include (but not be limited to):

- Relocation of the gateway further south; the new gateway access will be opposite Millner Ave;

- Relocation of the car park; and
- Removal of an existing diesel tank.

The Austral access works refers to the construction and demolition activities associated with the access upgrade and is detailed in the plan provided in **Appendix A**.

2. Scope of Assessment

The subject site is wholly located within the Austral Brickworks site and encompasses the area of proposed works along the Old Wallgrove Road frontage. The works will take place between the existing car park at the north and the proposed new gateway opposite Millner Ave at the south.

Note that the road verge outside of the Austral Brickworks site has been assessed previously by Cumberland Ecology as part of the Old Wallgrove Road Upgrade project and is not discussed in this assessment.

3. Methods

A review of the previous assessment, including literature and data sets considered at that time, was completed. The latest aerial from Google Earth was also reviewed (currency of the aerial is 2014). The review was followed up by a site inspection conducted on the 13 December 2014 by two ecologists (Cecilia Phu and Dr. David Robertson).

The site inspection involved a traverse of the alignment, during which a search was conducted for threatened flora species (e.g. *Grevillea juniperina*, *Acacia pubescens*, *Dillwynia parviflora*) previously recorded in the locality (within 5 km radius) of the subject site (refer to 14063 – Let3 for a complete list), and an assessment of available habitat for threatened fauna species (i.e. predominantly threatened birds and bats that have been recorded in the locality; see 14063 – Let3) was made.

The site inspection focussed particularly on the Critically Endangered Ecological Community (CEEC) Cumberland Plain Woodland, which is listed under the TSC Act and the EPBC Act and is known to occur in the area. Cumberland Plain Woodland, as it is listed under the TSC Act, includes native grassland derived from the clearance of woody over-storey species. Native grassland areas derived from the clearance of Cumberland Plain Woodland over-storey are not listed under the EPBC Act.

4. Key Findings

The subject site is part of the Austral Brickworks site, which has been operating since the 1970s. The subject site has largely been disturbed during that time, and features buildings, driveways, car parks, hard surfaces and ancillary structures such as diesel tanks and brick pallets.

4.1 Vegetation

i. Woody Vegetation

At the Old Wallgrove Road frontage, there is a strip of woody vegetation along the site fence line that extends from the existing gateway in the north and continues past the Millner Ave intersection. This woody vegetation is artificial (i.e. planted vegetation and not naturally occurring) and is comprised of native local species planted on a grassed bund. The bunding was established in the past from loose fill material to comply with noise conditions. The trees on the bund are relatively young; no mature trees were observed.

Trees species that have been planted include *Casuarina glauca* (Swamp Oak), *Eucalyptus moluccana* (Grey Box), *Acacia implexa* (Lightwood) and *Melaleuca styphelioides* (Prickly-leaved Tea Tree). The understorey is dominated by soil-stabilising perennial exotic grasses (including *Chloris gayana* Rhodes Grass, *Bromus catharticus* Prairie Grass, *Paspalum dilatatum* Paspalum, *Cynodon dactylon* Couch Grass) that would have been sown at the time the bund was established. Other abundant species recorded on the bund include *Plantago lanceolata* (Lamb's Tongue) and *Sida rhombifolia* (Farmer's Friend), which are both common exotic pasture species.

Some native woody species that were not originally planted but which were recorded occurring on the bund (i.e. have established voluntarily) include *Eucalyptus baueriana* (Blue Box) and *Bursaria spinosa* (Blackthorn). The native grass, *Themeda australis* (Kangaroo Grass) was also observed growing on the margins of the bund.

The planted bund does not represent native remnant woodland or forest vegetation. It has not been recognised in regional mapping data sets as a native remnant woodland or forest (NSW NPWS, 2002). No threatened ecological communities, such as Cumberland Plain Woodland, are represented by the bund vegetation. Photographs depicting the bund vegetation are provided in **Appendix B**.

ii. Grassland Vegetation

Grassed areas behind the planted bund are highly disturbed and are an extension of the bunding structure along the boundary of the site. In the northern section of the subject site, a small grassy area is dominated by *Pennisetum clandestinum* (Kikuyu) and is used as a septic tank irrigation zone. These areas are unlikely to comprise the Cumberland Plain Woodland community listed under the TSC Act.

4.2 Threatened Species and Threatened Species Habitat

No threatened flora or fauna species were recorded within the woody vegetation on the subject site during the site inspection. No threatened species were previously recorded within the subject site as indicated by the Atlas of NSW Wildlife database (refer to 14063 – Let3).

The condition of the vegetation on the bund as habitat for native threatened flora and fauna is considered to be low. The understorey is predominantly exotic and the soil profile in this area has been highly altered. Threatened flora species that have been known to occur in disturbed areas (such as *Grevillea juniperina*) are not cryptic species but were not recorded in the subject site. More cryptic threatened flora species (such as *Marsdenia viridiflora*) or weakly woody shrubs (such as *Pimelea spicata*) are more sensitive to disturbance and are unlikely to be present on the bund.

The trees are young in age and do not feature hollows or generously decorticating bark that would provide habitat for native threatened fauna species. At the time of survey, the trees were not flowering, and were therefore not providing foraging resources for nectarivorous fauna. The structure of the bund vegetation is very simple and does not provide valuable refugia for native threatened fauna. The vegetation on the bund is not well connected to significant patches of native remnant woodland in the locality. Therefore, it is unlikely that the bund vegetation would support, or provide important threatened species habitat for threatened fauna species that have been recorded in the locality.

The grassed areas of the subject site where there is no woody vegetation provides very limited habitat for native threatened fauna. The highly disturbed nature of these grassed areas also makes it highly unlikely that threatened flora species occur in these areas.

The occurrence of the Cumberland Plain Land Snail (*Meridolum corneovirens*) is unlikely. This species lives in decomposing organic matter in the soil and has a relationship with mycorrhizal fungi, which are typically present in relatively undisturbed and mature soil profiles.

5. Conclusion

Based on the above findings, it is unlikely that the proposed Austral access works will have a significant adverse impact on threatened species, populations and communities known to occur in the locality of the subject site.

Yours sincerely,



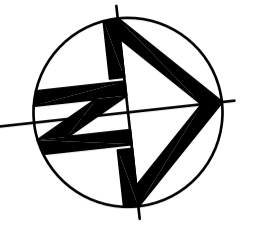
Cecilia Phu
Senior Project Manager/Ecologist
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References Cited

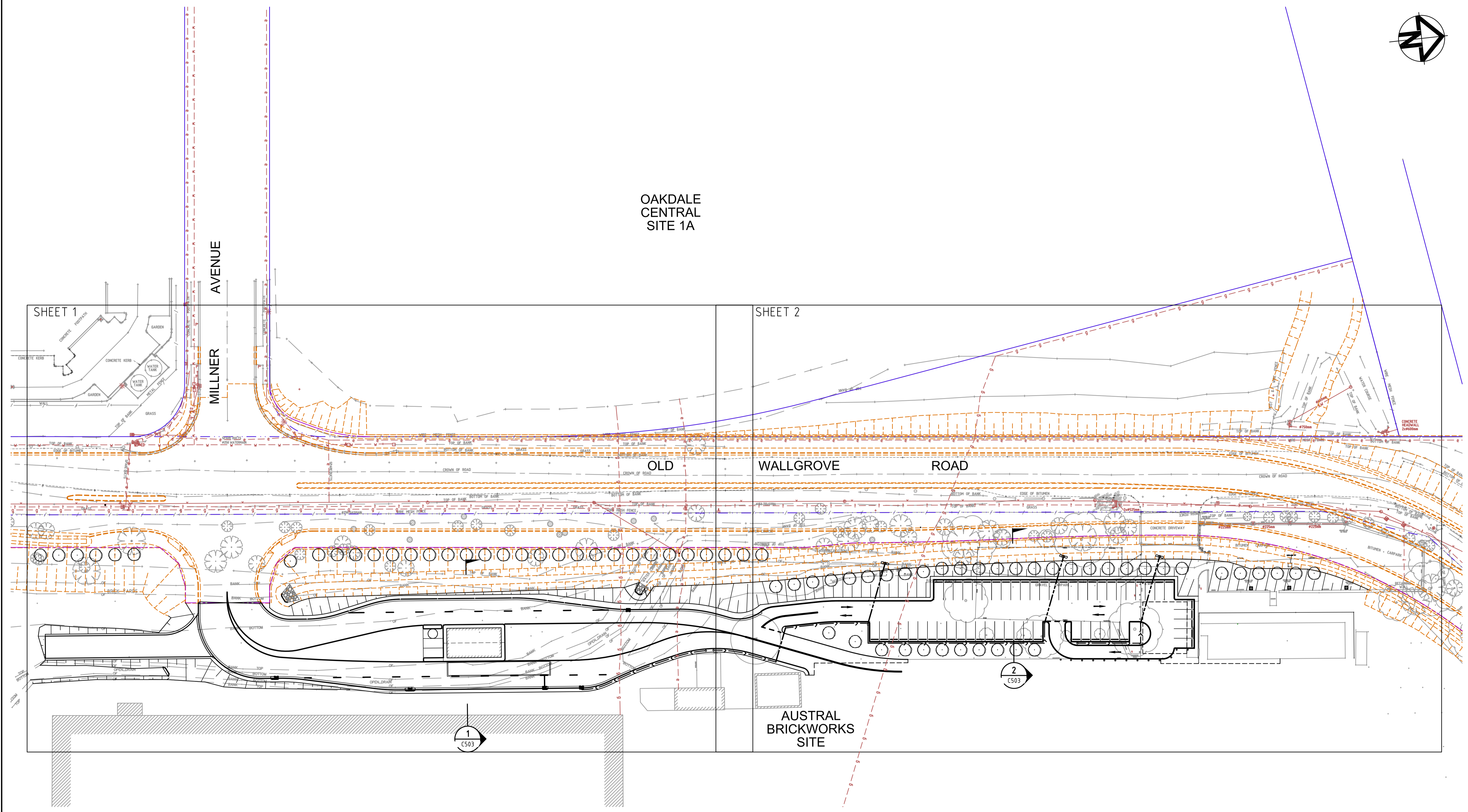
NSW NPWS (2002) *Native Vegetation Maps of the Cumberland Plain, Western Sydney*. 2008 Update. NSW National Parks and Wildlife Service, Sydney.

Appendix A

Site Plan

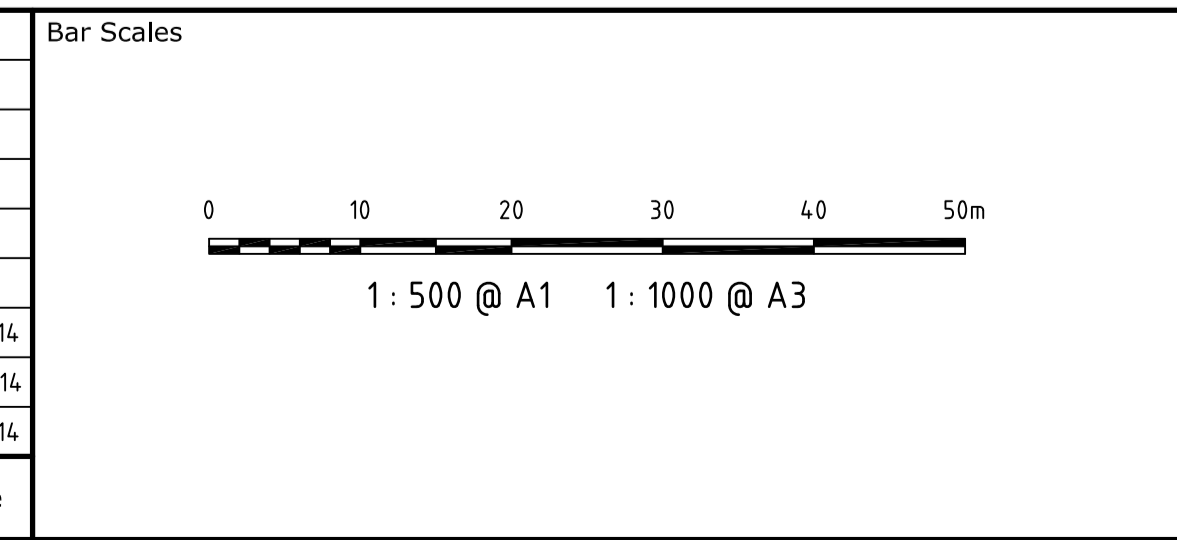


OAKDALE
CENTRAL
SITE 1A



SHEET BREAK UP PLAN @ 1 : 250
1 : 500

Issue	Description	Date
C	ISSUE FOR SSDA APPROVAL	12-12-14
B	ISSUE FOR TENDER ADDENDUM	04-12-14
A	ISSUE FOR TENDER	25-11-14



THIS DRAWING CANNOT BE COPIED OR REPRODUCED IN ANY FORM OR USED FOR ANY OTHER PURPOSE OTHER THAN THAT ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF AT&L

Client

Scale	1:500	Drawn	JB
Grid	MGA	Designed	JB
Height Datum	AHD	Checked	PW
		Approved	

Project

**OLD WALLGROVE ROAD
UPGRADE
AUSTRAL ACCESS**

Title

**GENERAL ARRANGEMENT
PLAN**

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Status	FOR APPROVAL NOT TO BE USED FOR CONSTRUCTION	A1
Drawing No.	C510	Issue
Project No.	13-129	C

Appendix B

Photographs - Bund Vegetation





